

Title (en)
INTEGRATED SYSTEM OF A METHANOGENIC ANAEROBIC REACTOR AND MEMBRANE BIOREACTOR FOR THE ELIMINATION OF ORGANIC MATERIAL AND NITROGEN FROM WASTEWATER

Title (de)
INTEGRIERTES SYSTEM AUS EINEM METHANOGENEN ANAEROBEN REAKTOR UND EINEM MEMBRANBIOREAKTOR ZUR ENTFERNUNG VON ORGANISCHEN MATERIALIEN UND STICKSTOFF AUS ABWASSER

Title (fr)
SYSTÈME INTÉGRÉ CONSTITUÉ D'UN RÉACTEUR ANAÉROBIE MÉTHANOGENÈ ET D'UN BIORÉACTEUR À MEMBRANES POUR L'ÉLIMINATION DE MATIÈRE ORGANIQUE ET D'AZOTE DANS DES EAUX RÉSIDUAIRES

Publication
EP 2952483 A1 20151209 (EN)

Application
EP 14745956 A 20140130

Priority
• ES 201330118 A 20130201
• ES 2014070067 W 20140130

Abstract (en)
Integrated methanogenic anaerobic reactor and membrane bioreactor, and method for eliminating organic matter and nitrogen in urban or industrial wastewater, preferably with COD concentrations between 150 and 5000 mg/L and where the eliminations of total nitrogen that occur are between 15 and 50 mg/L, at temperatures above 15 °C. The wastewater treatment takes place thanks to three stages of treatment: methanogenic anaerobic stage, anoxic stage with biofilms and suspended biomass and aerobic filtration stage with biofilms and suspended biomass.

IPC 8 full level
C02F 3/30 (2006.01); **C02F 3/08** (2006.01); **C02F 9/02** (2006.01); **C02F 103/00** (2006.01)

CPC (source: EP US)
C02F 3/1273 (2013.01 - EP US); **C02F 3/301** (2013.01 - US); **C02F 3/302** (2013.01 - EP US); **C02F 3/305** (2013.01 - US); **C12M 23/38** (2013.01 - US); **C12M 27/02** (2013.01 - US); **C12M 29/00** (2013.01 - US); **C12M 29/04** (2013.01 - US); **C12M 29/18** (2013.01 - US); **C02F 3/085** (2013.01 - EP US); **C02F 3/10** (2013.01 - EP US); **C02F 3/2806** (2013.01 - EP US); **C02F 3/2846** (2013.01 - EP US); **C02F 3/286** (2013.01 - EP US); **C02F 2101/16** (2013.01 - US); **C02F 2203/006** (2013.01 - US); **C02F 2209/08** (2013.01 - EP US); **C02F 2209/16** (2013.01 - EP US); **Y02E 50/30** (2013.01 - EP US); **Y02W 10/10** (2015.05 - EP US)

Cited by
CN110577325A; CN109607955A; IL274592B1; CN110156146A; WO2019097463A1; WO2018164720A1; US10703658B2

Designated contracting state (EPC)
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Designated extension state (EPC)
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EP 2952483 A1 20151209; **EP 2952483 A4 20160803**; BR 112015018299 A2 20170718; CL 2015002128 A1 20160401; ES 2401445 A1 20130419; ES 2401445 B2 20140120; MX 2015009836 A 20160222; MX 359689 B 20181005; PE 20151550 A1 20151110; US 2015368131 A1 20151224; US 9725345 B2 20170808; WO 2014118416 A1 20140807

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EP 14745956 A 20140130; BR 112015018299 A 20140130; CL 2015002128 A 20150729; ES 201330118 A 20130201; ES 2014070067 W 20140130; MX 2015009836 A 20140130; PE 2015001575 A 20140130; US 201414765055 A 20140130